

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: November 26, 2001, 09:16:10 ; Search time 149.54 Seconds
(without alignments)
17612.031 Million cell updates/sec

Title: US-08-482-402A-2
Perfect score: 3072
Sequence: 1 gagcgattgagcgcccat.....atagctcaaaaaaaaaa 3072

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 930621 seqs, 428662619 residues

Total number of hits satisfying chosen parameters: 1861242

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

N-Geneseq_1101:*

1:	/SIDS2/gcgdata/geneseq/geneseq/NA1980.DAT.*
2:	/SIDS2/gcgdata/geneseq/geneseq/NA1981.DAT.*
3:	/SIDS2/gcgdata/geneseq/geneseq/NA1982.DAT.*
4:	/SIDS2/gcgdata/geneseq/geneseq/NA1983.DAT.*
5:	/SIDS2/gcgdata/geneseq/geneseq/NA1984.DAT.*
6:	/SIDS2/gcgdata/geneseq/geneseq/NA1985.DAT.*
7:	/SIDS2/gcgdata/geneseq/geneseq/NA1986.DAT.*
8:	/SIDS2/gcgdata/geneseq/geneseq/NA1987.DAT.*
9:	/SIDS2/gcgdata/geneseq/geneseq/NA1988.DAT.*
10:	/SIDS2/gcgdata/geneseq/geneseq/NA1989.DAT.*
11:	/SIDS2/gcgdata/geneseq/geneseq/NA1990.DAT.*
12:	/SIDS2/gcgdata/geneseq/geneseq/NA1991.DAT.*
13:	/SIDS2/gcgdata/geneseq/geneseq/NA1992.DAT.*
14:	/SIDS2/gcgdata/geneseq/geneseq/NA1993.DAT.*
15:	/SIDS2/gcgdata/geneseq/geneseq/NA1994.DAT.*
16:	/SIDS2/gcgdata/geneseq/geneseq/NA1995.DAT.*
17:	/SIDS2/gcgdata/geneseq/geneseq/NA1996.DAT.*
18:	/SIDS2/gcgdata/geneseq/geneseq/NA1997.DAT.*
19:	/SIDS2/gcgdata/geneseq/geneseq/NA1998.DAT.*
20:	/SIDS2/gcgdata/geneseq/geneseq/NA1999.DAT.*
21:	/SIDS2/gcgdata/geneseq/geneseq/NA2000.DAT.*
22:	/SIDS2/gcgdata/geneseq/geneseq/NA2001.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3062.4	99.7	3072	14	AAQ37493 Human TPO gene. H
2	3004	97.8	3048	14	AAQ53061 Human thyroid pero
3	3003.4	97.8	3050	16	AAQ90304 Human thyroid pero
4	2998.4	97.6	3045	14	AAQ40728 Human TPO gene lac
5	2801.4	91.2	2847	19	AAV32403 Thyroid peroxidase
6	2511.4	81.8	2546	20	AAV37301 Human thyroid pero
7	469.8	15.3	2260	11	AAQ03118 HindIII/SpalI frag
8	469.8	15.3	3215	18	AAAT66437 Myeloperoxidase co
9	464.2	15.1	2272	21	AAZ45456 Nucleotide sequenc
10	438.2	14.3	2558	21	AAAF20923 Human eosinophil p
11	438.2	14.3	2558	21	AAA34801 Human adenosine re

ALIGNMENTS

RESULT 1

AAQ37493
ID AAQ37493 standard; DNA; 3072 BP.

XX AC AAQ37493;

XX DF 17-JUN-1993 (first entry)

XX DE Human TPO gene.

XX DE Disease associated B-cell epitope; human thyroid peroxidase;
KW Diagnosis; immune diseases; Hashimoto's thyroiditis;
KW pRPO-BS; pRPO(M1)-BS; site-directed mutagenesis; mutation;
KW stop codon; EcoRI site; transmembrane region; ss.

XX OS Homo sapiens.

XX PH Key Location/Qualifiers
XX CDS 85...2886

FT FT /*tag= a
FT FT /label= TPO
FT FT 2631

FT FT misc_feature /*tag= b
FT FT /note= "base to be mutated (G -> A) to introduce
FT FT stop codon and EcoRI site"

FT FT misc_feature 2634
FT FT /*tag= c
FT FT /note= "base to be mutated (C -> T) to introduce
FT FT EcoRI site"

FT FT misc_feature 2635
FT FT /*tag= d

FT FT /note= "base to be mutated (T -> C) to introduce
FT FT EcoRI site"

FT FT misc_feature 2642

12	438.2	14.3	6103	21	AAF21441	Human eosinophil p
13	417	13.6	5510	21	AAZ51671	Human p53 target m
14	417	13.6	6847	20	AAV99922	Melanoma associate
15	386	12.6	2710	12	AAQ11842	Bovine lactoperox
16	367.8	12.0	1386	19	AAV11507	Recombinant MPO DN
17	347.8	11.3	35384	21	AAF21436	Human enzyme-relat
18	314.4	10.2	316	20	AAV72576	Thyroid peroxidase
19	298.8	9.7	2637	21	AAV93446	Human secreted pro
20	298.8	9.7	2736	22	AAQ08330	Human secreted pro
21	289.4	9.4	1399	12	AAQ11843	Human lactoperoxid
22	199.2	6.5	702	19	AAV11509	Recombinant MPO DN
23	190.6	6.2	615	19	AAV11514	Recombinant MPO DN
24	183.6	6.0	699	19	AAV11508	Recombinant MPO DN
25	165.8	5.4	169	20	AAV72575	Thyroid peroxidase
26	146.2	4.8	417	19	AAV11511	Recombinant MPO DN
27	134.8	4.4	444	19	AAV11515	Recombinant MPO DN
28	116.4	3.8	387	19	AAV11512	Recombinant MPO DN
29	111	3.6	324	19	AAV11516	Recombinant MPO DN
30	74.8	2.4	393	19	AAV11510	Recombinant MPO DN
31	73	2.4	257	22	AAI25101	Probe #15034 for g
32	73	2.4	257	22	AAI50972	Probe #19658 used
33	72.4	2.4	5494	21	AAQ00696	Human mitogenic re
34	71.8	2.3	325	21	AAV20919	Human eosinophil p
35	70.6	2.3	325	21	AAV34797	Human adenosine re
36	70.6	2.3	237	19	AAV11521	Recombinant MPO DN
37	70	2.3	437	21	AAV20922	Human eosinophil p
38	70	2.3	437	21	AAV34800	Human adenosine re
39	68.6	2.2	150	19	AAV11517	Recombinant MPO DN
40	68.2	2.2	389	22	AAI24688	Probe #14621 for g
41	68.2	2.2	389	22	AAI50019	Probe #18705 used
42	68.2	2.2	473	22	AAI15459	Probe #5392 for ge
43	68.2	2.2	473	22	AAI36820	Probe #5506 used t
44	68.2	2.2	482	21	AAV20918	Human eosinophil p
45	68.2	2.2	482	21	AAV34796	Human adenosine re

QY 1561 ggccatgccacgatcacccgctgtgagaggtcggagccagcttccaggagcacc 1620
|||||
Db 1561 ggccatgccacgatcacccgctgtgagaggtcggagccagcttccaggagcacc 1620
QY 1621 gacctgcccggctgtgctgcacaggttcttccagcccattgacattactccgtga 1680
|||||
Db 1621 gacctgcccggctgtgctgcacaggttcttccagcccattgacattactccgtga 1680
QY 1681 ggtgtgttgaccactaatcagagccttcttgaagaccagccaaactgcaggtgcag 1740
|||||
Db 1681 ggtgtgttgaccactaatcagagccttcttgaagaccagccaaactgcaggtgcag 1740
QY 1741 gatcagctgatgaacgagctgacgaaaggcttcttctgtctgtcccaattccagcacc 1800
|||||
Db 1741 gatcagctgatgaacgagctgacgaaaggcttcttctgtctgtcccaattccagcacc 1800
QY 1801 ttggtatctgctccatcaactcagaggtcagagggccggagccacgggtgcaggttacaat 1860
|||||
Db 1801 ttggtatctgctccatcaactcagaggtcagagggccggagccacgggtgcaggttacaat 1860
QY 1861 gagttagaggagtctgcggctgctcctgccttgagaccccccgctgaacctgagcacagcc 1920
|||||
Db 1861 gagttagaggagtctgcggctgctcctgccttgagaccccccgctgaacctgagcacagcc 1920
QY 1921 atcgccagcagagcgtgctgcgacaaagatccctggacttgtacaagcatcctgacaacatc 1980
|||||
Db 1921 atcgccagcagagcgtgctgcgacaaagatccctggacttgtacaagcatcctgacaacatc 1980
QY 1981 gatgtctgctggaggcttagctgaaacttctcccccagggtcggagagggcccccctg 2040
|||||
Db 1981 gatgtctgctggaggcttagctgaaacttctcccccagggtcggagagggcccccctg 2040
QY 2041 tttgctgtctcattgggaagcagatgaagctctgcggagcgtgactggttttggctg 2100
|||||
Db 2041 tttgctgtctcattgggaagcagatgaagctctgcggagcgtgactggttttggctg 2100
QY 2101 gagaacagccagctctcacggtgacacagagcgtgagctggagagcactccctgtct 2160
|||||
Db 2101 gagaacagccagctctcacggtgacacagagcgtgagctggagagcactccctgtct 2160
QY 2161 cgggttcatctgtacaacactggctcaccaggtggtcccatggatgcttccaaagtcgc 2220
|||||
Db 2161 cgggttcatctgtacaacactggctcaccaggtggtcccatggatgcttccaaagtcgc 2220
QY 2221 aaattccccgaagactttagctctgtgacagcatcactggcatgaacctggagcctgg 2280
|||||
Db 2221 aaattccccgaagactttagctctgtgacagcatcactggcatgaacctggagcctgg 2280
QY 2281 agggaaaccttctccaaagacacagatgtggtcttccagagagcgtggagaaatggggac 2340
|||||
Db 2281 agggaaaccttctccaaagacacagatgtggtcttccagagagcgtggagaaatggggac 2340
QY 2341 tttgtcactgtgagagctgtggaggcgtgctggtgtattcttcggcgacgggtat 2400
|||||
Db 2341 tttgtcactgtgagagctgtggaggcgtgctggtgtattcttcggcgacgggtat 2400
QY 2401 gacttccaaagccggagcagctcacttgacccaggaagatggatttccagctccc 2460
|||||
Db 2401 gacttccaaagccggagcagctcacttgacccaggaagatggatttccagctccc 2460
QY 2461 ctctgcaaatgtgacagctgtgcagcgttgccaccccccttcggcacgctctgg 2520
|||||
Db 2461 ctctgcaaatgtgacagcgtgtgcagcgttgccaccccccttcggcacgctctgg 2520
QY 2521 aggtgcagaacacaaagcgttccagtgctctgcgcggagccctacaggttagga 2580
|||||
Db 2521 aggtgcagaacacaaagcgttccagtgctctgcgcggagccctacaggttagga 2580
QY 2581 gacgatggagaacctgcgtagactccggaggtcccttcgggtgacttgatctccatg 2640
|||||
Db 2581 gacgatggagaacctgcgtagactccggaggtcccttcgggtgacttgatctccatg 2640
QY 2641 tcgctggtcgtctcgtgatcgagggttcgcaggttctcacctcgacgtgatttcag 2700

Db 2641 tcgctggtcgtcgtcgtgatcgagggttcgaggtctcacctcgacggtgatttcag 2700
|||||
QY 2701 tggacacgactggtcactaaatccacactgcccactctcggagacagcgaggaactccc 2760
|||||
Db 2701 tggacacgactggtcactaaatccacactgcccactctcggagacagcgaggaactccc 2760
QY 2761 gactgagatgcgaaagcaccagccgtaggagctcacccgagcggcgagcactcag 2820
|||||
Db 2761 gactgagatgcgaaagcaccagccgtaggagctcacccgagcggcgagcactcag 2820
QY 2821 gactcggagcaggagtgctggtggtgaaagccgggatactcacaggtgcccagagacc 2880
|||||
Db 2821 gactcggagcaggagtgctggtggtgaaagccgggatactcacaggtgcccagagacc 2880
QY 2881 ctctgaagggcaaatggtgcaggacactgcagaacagcttcttcccataatcacctgac 2940
|||||
Db 2881 ctctgaagggcaaatggtgcaggacactgcagaacagcttcttcccataatcacctgac 2940
QY 2941 gactcttttccaaacacagcgaatcgaaatcgagcagcagctgttttcccacacgg 3000
|||||
Db 2941 gactcttttccaaacacagcgaatcgaaatcgagcagcagctgttttcccacacgg 3000
QY 3001 gtaaatctagtaccatgtcgtagttagttactctcagcagcagtgatgataatgtttatagctgc 3060
|||||
Db 3001 gtaaatctagtaccatgtcgtagttagttactctcagcagcagtgatgataatgtttatagctgc 3060
QY 3061 aaaaaaaaaa 3072
|||||
Db 3061 aaaaaaaaaa 3072

RESULT 2
AAQ53061
ID AAQ53061 standard; mRNA; 3048 BP.
XX
AC AAQ53061;
XX
AT 02-JUN-1994 (first entry)
XX
DE Human thyroid peroxidase.
XX
KW Peroxidase; plasmid pHTPO-2.8; epitope fragment; disease diagnosis;
EC-1.11.1.7; ds.
XX
OS Homo sapiens.
XX
PN WO9323073-A.
XX
PD 25-NOV-1993.
XX
PF 22-APR-1993; 93WO-US03837.
XX
PR 19-MAY-1992; 92US-0885656.
XX
PA (UNMI) UNIV MICHIGAN.
XX
PI Baker JR, Koenig RJ;
XX
DR WPI; 1993-386217/48.
XX
DR P-PSDB; AAR44615.
XX
PT Isolated specific epitopic regions screening for thyroid
peroxidase auto antibody in sample - by using diagnostic reagent
for auto immune thyroid disease and for immuno therapy of thyroid
disease and thyroid cancer, for cellular immunity
PS
XX Disclosure; Page 64-67; 99pp; English.
XX
CC The epitope peptides encoded by the DNA may be used for
immunotherapy of thyroid disease (e.g. Hashimoto disease) and thyroid
cancer
XX

SQ	Sequence 3048 BP; 671 A; 930 C; 881 G; 566 T; 0 other;	
	Query Match 97.8%; Score 3004; DB 14; Length 3048;	
	Best Local Similarity 99.3%; Pred. NO. 0;	
	Matches 3028; Conservative 0; Mismatches 15; Indels 5; Gaps 1;	
QY	18 catttcagaagagttacagccgctgaaattactcagcagtgctgaggaagagga 77	
DB	1 catttcagaagagttacagccgctgaaattactcagcagtgctgaggaagagga 60	
QY	78 aaaa-----agaatgagagcgtgctgtgtctgtctgtctcagctggttatggcctgaca 132	
DB	61 aaaaagtcagaatgagagcgtcgtgtgtctgtctgtctcagctggtttaaggcctgaca 120	
QY	133 gaagccttctcccttcattctcagaggggaaagaactcctttgggaaagcctgagag 192	
DB	121 gaagccttctcccttcattctcagaggggaaagaactcctttgggaaagcctgagag 180	
QY	193 tctcgtgtctctagcgtctctgaggaagcaagcctcgtgtgacacccgcattgacgc 252	
DB	181 tctcgtgtctctagcgtctctgaggaagcaagcctcgtgtgacacccgcattgacgc 240	
QY	253 acgatcgagagaacctcaagaaagaggaatcctttctggagctcagcttctgtctttt 312	
DB	241 acgatcgagagaacctcaagaaagaggaatcctttctcagctcagcttctgtctttt 300	
QY	313 tccaaactctctgagccaaacagcgagtgatggtcccgagcagcagagataatggaaaca 372	
DB	301 tccaaactctctgagccaaacagcgagtgatggtcccgagcagcagagataatggaaaca 360	
QY	373 tcaatacagcgatgaaagaaagtcacactgaaactcaacactcaacactcacagcatccaacg 432	
DB	361 tcaatacagcgatgaaagaaagtcacactgaaactcaacactcaacactcacagcatccaacg 420	
QY	433 gatgctttatcagaagatctgctgagcatcattgcaaaactgtgtgagtctcctcttac 492	
DB	421 gatgctttatcagaagatctgctgagcatcattgcaaaactgtgtgagtctcctcttac 480	
QY	493 atgctgcccccaaaatgccaaacactgcttggtgcgaaataacacagcccatcacagga 552	
DB	481 atgctgcccccaaaatgccaaacactgcttggtgcgaaataacagcccatcacagga 540	
QY	553 gcttgcacaacagagaccaccccgatggggcgctcccaacagcgccctggcacgatgg 612	
DB	541 gcttgcacaacagagaccaccccgatggggcgctcccaacagcgccctggcacgatgg 600	
QY	613 ctccctccagctctatgaggcggcttcagtcagcccccgaggtggaaccccggtctttg 672	
DB	601 ctccctccagctctatgaggcggcttcagtcagcccccgaggtggaaccccggtctttg 660	
QY	673 tacaacgggttccactgcccccggtccggagggtgacaagacatgcatcattcaagtttca 732	
DB	661 tacaacgggttccactgcccccggtccggagggtgacaagacatgcatcattcaagtttca 720	
QY	733 aatgaggtgtcacagatgatgaccgtattctgacctctctgacgttggtgggacaaatac 792	
DB	721 aatgaggtgtcacagatgatgaccgtattctgacctctctgacgttggtgggacaaatac 780	
QY	793 atcgacaacagacatcggtttcacaccacagagcaccagcaaaagctgcttcgggggaggg 852	
DB	781 atcgacaacagacatcggtttcacaccacagagcaccagcaaaagctgcttcgggggaggg 840	
QY	853 tctgactgcagatgactgtgagaacaaaacccatgttttcccatacaactcccggag 912	
DB	841 gctgactgcagatgactgtgagaacaaaacccatgttttcccatacaactcccggag 900	
QY	913 gagcccgccgcccggcgacgcctgtctgcccctctacgcctcttcggccgctgc 972	
DB	901 gagcccgccgcccggcgacgcctgtctgcccctctacgcctcttcggccgctgc 960	
QY	973 ggcaccggggacaaaggcgcgtcttttgggaacctgtccacggccaacccgagcagcag 1032	

DB	961 ggcaccgggggaccaaaggcgcgctcttttgggaacctgtccacggccaacccggcgagcag 1020	
QY	1033 atgaacgggttgacctgttctctgacgcgtccaccgtgtatggcagctcccccggcccta 1092	
DB	1021 atgaacgggttgacctgttctctgacgcgtccaccgtgtatggcagctcccccggcccta 1080	
QY	1093 gagaggcagctgcggaactgagacaagtccgaagggtctctccgcttcacagggccctc 1152	
DB	1081 gagaggcagctgcggaactgagacaagtccgaagggtctctccgcttcacagggccctc 1140	
QY	1153 cgggactccggccgcgtactcgtcctctgtgcgcacgcgcgcctctgcccctgttgcg 1212	
DB	1141 cgggactccggccgcgtactcgtcctctgtgcgcacgcgcgcctctgcccctgttgcg 1200	
QY	1213 cccgagcccgccaaacccggagagaccggcgccctgtctctgcccggagacggccgc 1272	
DB	1201 cccgagcccgccatcccccggagagaccggcgccctgtctctgcccggagacggccgc 1260	
QY	1273 gccagcgagggtccctctccctgacggcactgcacacgcgtgtggtgcgogagcacaaaccg 1332	
DB	1261 gccagcgagggtccctctccctgacggcactgcacacgcgtgtggtgcgogagcacaaaccg 1320	
QY	1333 ctggccggcgcgctcaaggccctcaatgcgcactgagcggcagcgcgcgtgtaccagag 1392	
DB	1321 ctggccggcgcgctcaaggccctcaatgcgcactgagcggcagcgcgcgtgtaccagag 1380	
QY	1393 gcgcgcaagggtcgtggcgctctgcacacagatcatcacctgagggattacatccccag 1452	
DB	1381 gcgcgcaagggtcgtggcgctctgcacacagatcatcacctgagggattacatccccag 1440	
QY	1453 atcctgggaccccgaggccttcacagcagtcagtggtggtccctatgaaggcttatgactccac 1512	
DB	1441 atcctgggaccccgaggccttcacagcagtcagtggtggtccctatgaaggcttatgactccac 1500	
QY	1513 gccaaacccactgtgtccaaagtggttccacacgcgccttccgcttgcggtccatgccacg 1572	
DB	1501 gccaaacccactgtgtccaaagtggttccacacgcgccttccgcttgcggtccatgccacg 1560	
QY	1573 atcacaccgctggtgagaggtgcgcacgcttccagggacaccccgacactgcccggag 1632	
DB	1561 atcacaccgctggtgagaggtgcgcacgcttccagggacaccccgacactgcccggag 1620	
QY	1633 ctgtggtgcaccaggcttcttcagcccatggacattactcctgtggaggtgtggtttggac 1692	
DB	1621 ctgtggtgcaccaggcttcttcagcccatggacattactcctgtggaggtgtggtttggac 1680	
QY	1693 ccactaatcagagcgcttcttgcaagacacagccaaactgcaggtgcaggtcagctgatg 1752	
DB	1681 ccactaatcagagcgcttcttgcaagacacagccaaactgcaggtgcaggtcagctgatg 1740	
QY	1753 aacgagagctgacggaaaggctcttctgtctccaattccagacacttgatctggcg 1812	
DB	1741 aacgagagctgacggaaaggctcttctgtctccaattccagacacttgatctggcg 1800	
QY	1813 tccatcaacctgcagagggcgccgacacggctgcaggtttacaagtgtggagggag 1872	
DB	1801 tccatcaacctgcagagggcgccgacacggctgcaggtttacaagtgtggagggag 1860	
QY	1873 ttctgcccctgcctcgtcgtggagaccccccgtgcacctgagcacagccatcccgagcag 1932	
DB	1861 ttctgcccctgcctcgtcgtggagaccccccgtgcacctgagcacagccatcccgagcag 1920	
QY	1933 agcgtggccgacagatccttgagactgttacaagcatcctgacaacatcgatcttggctg 1992	
DB	1921 agcgtggccgacagatccttgagactgttacaagcatcctgacaacatcgatcttggctg 1980	
QY	1993 ggaggcttagctgaaaccttcttccccgggctgcgacagggccctctgttccctgtctc 2052	
DB	1981 ggaggcttagctgaaaccttcttccccgggctgcgacagggccctctgttccctgtctc 2040	
QY	2053 attgggaagcagatgaaggctctgcggacggtgactggttttgggagaaacagcagc 2112	
DB	2041 attgggaagcagatgaaggctctgcggacggtgactggttttgggagaaacagcagc 2100	

Qy	781	tggggacaatacatogacccacgacatcgcttccacacacagagacacgacgaagtgcgc	840
Db	781	tggggacaatacatcgacacgacatcgcttccacacacagagacacgacgaagtgcgc	840
Qy	841	ttcggggggagggtctgactgcagatgactgtgagaaacaaaacccatgttttccata	900
Db	841	ttcggggggagggtctgactgcagatgactgtgagaaacaaaacccatgttttccata	900
Qy	901	caactcccggagagggccggccggcgccgggacccgctgtctgcctttctaccgctct	960
Db	901	caactcccggagagggccggccggcgccgggacccgctgtctgcctttctaccgctct	960
Qy	961	tggcgccgctgcggcaaccggggaccaaagcgcgctctttggaaacctgtccaaaggccaac	1020
Db	961	tggcgccgctgcggcaaccggggaccaaagcgcgctctttggaaacctgtccaaaggccaac	1020
Qy	1021	ccgagcacaatgaacgggttgaccttgcttctggacgctccacccgtgtatggcagc	1080
Db	1021	ccgagcacaatgaacgggttgaccttgcttctggacgctccacccgtgtatggcagc	1080
Qy	1081	tccccggccttagagagcgagctgcggaactggacccagtgcgaagggtgctcgcgctc	1140
Db	1081	tccccggccttagagagcgagctgcggaactggacccagtgcgaagggtgctcgcgctc	1140
Qy	1141	cacggcgctctcgggactccggcgcgcgctacctgcctctctgtgcgcgaacgcgcgct	1200
Db	1141	cacggcgctctcgggactccggcgcgcgctacctgcctctctgtgcgcgaacgcgcgct	1200
Qy	1201	gcggctctgtgcccgagcccggaaccccgagagaccccgagaccccgagccctgtctctggc	1260
Db	1201	gcggctctgtgcccgagcccggaaccccgagagaccccgagaccccgagccctgtctctggc	1260
Qy	1261	ggagacggccggcgacgaggtctccctccctgcgacgtgcacacgctgtggtctcgc	1320
Db	1261	ggagacggccggcgacgaggtctccctccctgcgacgtgcacacgctgtggtctcgc	1320
Qy	1321	gagcaaacccgctggcggcgctcaaggccctcaatgcgcactggagcggagcgc	1380
Db	1321	gagcaaacccgctggcggcgctcaaggccctcaatgcgcactggagcggagcgc	1380
Qy	1381	gtgtaccagaggcgcgaagctctgggcgtctgcacagatcatcaccttgaggat	1440
Db	1381	gtgtaccagaggcgcgaagctctgggcgtctgcacagatcatcaccttgaggat	1440
Qy	1441	tacatcccaggatctgtggacccgagccttccagcagtagctgggtccctatgaaggc	1500
Db	1441	tacatcccaggatctgtggacccgagccttccagcagtagctgggtccctatgaaggc	1500
Qy	1501	tatgactccacgcgcaaccccactgtgtccacgtgtttctccacagcgcgtctcgcgttc	1560
Db	1501	tatgactccacgcgcaaccccactgtgtccacgtgtttctccacagcgcgtctcgcgttc	1560
Qy	1561	ggccatgccacgatccacccgctgtgtgaggagctgtgagcgcagcttccaggagacccc	1620
Db	1561	ggccatgccacgatccacccgctgtgtgaggagctgtgagcgcagcttccaggagacccc	1620
Qy	1621	gacctgccgggctgtgctgcacacgcttcttcaggcccatggacattactccttgga	1680
Db	1621	gacctgccgggctgtgctgcacacgcttcttcaggcccatggacattactccttgga	1680
Qy	1681	ggtgtgttgaccactaatacagagcctcttgcaagaccagacccaactgcaggtgcag	1740
Db	1681	ggtgtgttgaccactaatacagagcctcttgcaagaccagacccaactgcaggtgcag	1740
Qy	1741	gatcagctgatgaacgagagctgacggaaaggctcttgtgtccaatctccagcacc	1800
Db	1741	gatcagctgatgaacgagagctgacggaaaggctcttgtgtccaatctccagcacc	1800
Qy	1801	tggatctggcttcatcaactcagagggcgccgggacacagggctgcagggttacaat	1860
Db	1801	tggatctggcttcatcaactcagagggcgccgggacacagggctgcagggttacaat	1860
Qy	1861	gagtgagggaggttctgcggcctgcctgccttgagacaccccgctgacctgaacacagcc	1920

1861	Db	 gagtgaggagttctctgcgcctgcctgcctggagaccccgctgacctgagcacgccc	1920
1921	Qy	atcgccacagagacgctggccgacaaagatccctggactgtacaagcatcctaacaacatc	1980
1921	Db	atcgccacagagagcgtggccgacaaagaacctggactgtacaagcatcctaacaacatc	1980
1981	Qy	gatgtctggctgggaggttagctgaaaacttctcccagaggtcgagacagggcccctg	2040
1981	Db	gatgtctggctgggaggttagctgaaaactccctcccagaggtcgagacagggcccctg	2040
2041	Qy	tttgctgtctcatctgggaagcagatgaaggctctctgcggagcgtgactggttttggtgg	2100
2041	Db	tttgctgtctcatctgggaagcagatgaaggctctctgcggagcgtgactggttttggtgg	2100
2101	Qy	gagaacagccacgtctcacggtacacagagcgtagctggaagaacactccctgtct	2160
2101	Db	gagaacagccacgtctcacggtacacagagcgtagctggaagaacactccctgtct	2160
2161	Qy	cgggtcatctgtgacaacactggctcacaggtgcccataggatgccttccaagtcggc	2220
2161	Db	cgggtcatctgtgacaacactggctcacaggtgcccataggatgccttccaagtcggc	2220
2221	Qy	aaattcccggaactttgagtctgtgacagcatcactggcatgaacctggaggcctgg	2280
2221	Db	-----gacagcatcactggcatgaacctggaggcctgg	2283
2281	Qy	agggaacctttcctcaagacacaaagtgtgcttcccagagagcgtgagaaatgggac	2340
2284	Db	agggaacctttcctcaagacacaaagtgtgcttcccagagagcgtgagaaatgggac	2313
2341	Qy	tttgtgactgtgaggagtcctggaggcgctgctggtgtattcttcgcgcgacaggtat	2400
2314	Db	tttgtgactgtgaggagtcctggaggcgctgctggtgtattcttcgcgcgacaggtat	2373
2401	Qy	gagctccaaagccggagcagctcacttgaccccaggaaggatgggatttccagctccc	2460
2374	Db	gagctccaaagccggagcagctcacttgaccccaggaaggatgggatttccagctccc	2433
2461	Qy	ctctgcaagatgtgaacaggtgtgaacaggtgtccaccccccttcgacagcctctgg	2520
2434	Db	ctctgcaagatgtgaacaggtgtgaacaggtgtccaccccccttcgacagcctctgg	2493
2521	Qy	aggtgcagaacaccaaaggcgcttcagtgctctgcgcgagacccctacaggttagga	2580
2494	Db	aggtgcagaacaccaaaggcgcttcagtgctctgcgcgagacccctacaggttagga	2553
2581	Qy	gacgatgggagaaactgcgtagactccggaggctccctcggtgacttggatctccatg	2640
2554	Db	gacgatgggagaaactgcgtagactccggaggctccctcggtgacttggatctccatg	2613
2641	Qy	tcgttcgctgtctgtgatcgagggttcgcaggttctcacctcgacggtgatttcagg	2700
2614	Db	tcgttcgctgtctgtgatcgagggttcgcaggttctcacctcgacggtgatttcagg	2673
2701	Qy	tggacacgcacttgcactaaaacctgcacactgcacacttcggagacagcgaggaaactccc	2760
2674	Db	tggacacgcacttgcactaaaacctgcacacttcggagacagcgaggaaactccc	2733
2761	Qy	gagctgagatgcggaagaccagggcgttagggacctaccgcagcgcgccgagctcag	2820
2734	Db	gagctgagatgcggaagaccagggcgttagggacctaccgcagcgcgccgagctcag	2793
2821	Qy	gactcggagcaggagagtgctgggatggaagccgggatactcaaggtgcgcgagagcc	2880
2794	Db	gactcggagcaggagagtgctgggatggaagccgggatactcaaggtgcgcgagagcc	2853
2881	Qy	ctctgagggcaagtggcagggacactgcagacaggttcatgttcccaaaatcacggtac	2940
2854	Db	ctctgagggcaagtggcagggacactgcagacaggttcatgttcccaaaatcacggtac	2913
2941	Qy	gactcttttccaaacacagggcaaatcggaatctcagcagacgactgttttcccaacagg	3000

nb 747 ctccaac

b
747 ctccaccgtgccctttatgcgcctggctgcccgccggagtatgagacgacctctctctcc 806

Db 632 tgttcacgagtgaggccagcttcattgaccatgacctgagaccttctccccggagtcctcccg 691
Qy 830 gcaaaagtgccttgagggggtctgactgccaagatgacttgtagaaccacaaacccat 889
Db 692 ccagatggccttcactgcaggcgttgactgtgagagacctgcgccagctgccccct 751
Qy 890 gttttccataaactccccgagagagcccgcccgccggccgagccagctgtgtgcct 949
Db 752 gctttccataaagatccc-----acccaatgacccccgcatacgaacacagcgtgact 806
Qy 950 tctaccgcttctgcgcctgcggcaccggggaacaggcgcgctcttttgggaacctgt 1009
Db 807 catcccttcttcgctcg-----gcaccctcatgcccccaaa 844
Qy 1010 ccacggccaaaccgagcgacagatgaacgggttgactgttctctggaagcgctccacgg 1069
Db 845 acaagaacagagtcgcgaacacagataaacgcgtcacctcttctgtgagcgcagatgg 904
Qy 1070 tgatggcagctccccgcctcagatgagagggcagctgcggaactgaccagtgccgaaggc 1129
Db 905 tgatggcagtgaggtctccctctcgctggcgtccgcgaacccgacacactacactgggc 964
Qy 1130 tgcctccgtccacggcgctccggaactccggcgccggcgccgctacctgcttctgcgc 1189
Db 965 tgcggccataccacagcgcttccaagacacggccggccgtgctgccccttcgacaccc 1024
Qy 1190 cagcggcgctgcggcctgtgcgcgcagccggcgacccccggagagacccggcgccct 1249
Db 1025 tgcacga-----tgacctctctctcaccaaccgctcgcgcgatccct 1072
Qy 1250 gcttctcggcgagagcgccgcagcgagggttccctctcctgacggcactgcacacgc 1309
Db 1073 gcttctcggcaggtgacacccgatcaacggaaccccccaactggcagccatgcacaccc 1132
Qy 1310 tgtgctgcgcagacacacccgctgcccggcgccgctcaaggccctcaatgcgcactgga 1369
Db 1133 tctttaTgcagagacaaacggctgcccaccgagctgagacgctgaaatccccgggtgga 1192
Qy 1370 gcgcgagcgctgtacagagagcgcgcaaggtcgtggcgctctgcacacgatcatca 1429
Db 1193 atggagacaaactgacaatgagctcggaagatcatgggggccaatggtccagatcatca 1252
Qy 1430 ccctgaggggtatcatcccccaggtatcctgggaccccgagccttccagcagtcagtggctc 1489
Db 1253 cctaccgagacttctgcccctgttctgggcaagcccgccggcagagaaacctggggc 1312
Qy 1490 cctatgaagcgtatgactcaaccccaaccccaactgtgtccaagctgttctccacagccg 1549
Db 1313 actacagggggtactgtctccaatgtgaccacacgggtggccaatg---tcttccacctgg 1369
Qy 1550 ctttccgcttcggccatgccacgatccacccgctgggtgagggagcgtgagcgcagcttc 1609
Db 1370 ctttccgcttggccacaaatgctccagccctcatgttcgcttggagacagtcagtacc 1429
Qy 1610 aggagacccccgaactgcgcgggctgtggctgacccaggttttcttcagcccatggacat 1669
Db 1430 gggcctcgcacccaactgcgatctcccacttagctctgcttcttggcagctggcgga 1489
Qy 1670 tactccgtgaggtggtttggaccacataatacagagccctctcttgcgaagaccagccaaac 1729
Db 1490 tctgtatgaagggggcatgacccccatctccggggcctcatggtccacccctgccaaagc 1549
Qy 1730 tgcaggtgcagagatcagctgatacagagagagctgacggaaggctcttctgtgtcca 1789
Db 1550 tgaaccctcaggaTgcacatgtagtgatgagctccggggagccgggctgtttcggcgaagtga 1609
Qy 1790 attccagacaccttgatctgcgtgccatcaacctgcagagggcgccgggacacacgggctgc 1849
Db 1610 ggaagattggctgacctggcagctctcaacatgcaacgaagccgggacacacggcttc 1669
Qy 1850 caggttacaatgagtgagggagttctgcggcctgcctgcctggagaccccccgctgacc 1909
Db 1670 cagggtaaatgcttgaggcgctctctgtgggctctccacgccccggaatttggcacagc 1729

Qy 1910 tgagcacagccatccagcagcagagcgtggccgacaaagatcctggacttgtacaagcacc 1969
Db 1730 ttagccgggtgctgataaaacacagagctggcaaggaagtctcctgaattgtatgaaacac 1789
Qy 1970 ctgacaacatcagatgctggctgggagccttagctgaaaaacttctcccccagggctcgga 2029
Db 1790 ctgacaacatgacatcgtgattggggccatcgtgagcctcttctgcgggggctcgag 1849
Qy 2030 caggggccctgttgcctgtctcattgggaagcagatgaagcctctgcgggagcgtgact 2089
Db 1850 tggggcctctctgcctgtctgtctgcgagaacag--tccagaagagccgagacggagaca 1908
Qy 2090 ggttttggtggagagacagccacgtcttcacggatgcacagagggcgtgagctggagaagc 2149
Db 1909 ggttctgtggcagacagaggtgttttcacc--aaagacagcgcaaggccctgagcagaa 1966
Qy 2150 actcctgtctcgtgggtcatctgtgacaacactggcctcaccaggggtgccatggatgcct 2209
Db 1967 ttctctgtctcgaattatgtgacaataccglataccacggtttccaagggacatct 2026
Qy 2210 tccaagtgcgaaaattccccgaagactttagcttctgtgacagcatcactggcagtaacc 2269
Db 2027 tccagccaacatctaccctcctggccttctgtgaactgcagccgtatccccaggttgaacc 2086
Qy 2270 tggaggcctggagggaacct 2290
Db 2087 tatcagcctggcaggggacat 2107

RESULT 12
AAF21441
ID AAF21441 standard; DNA; 6103 BP.

XX AC AAF21441;
XX DT 14-MAR-2001 (first entry)
XX DE Human eosinophil peroxidase polynucleotide fragment #3008.

XX KW Low adenosine antisenase oligonucleotide; phosphorothioate; allergy;
human; airway disorder; bronchoconstriction; lung inflammation;
surfactant depletion; respiratory; bronchodilator; antiinflammatory;
immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic;
respiratory obstruction; pulmonary obstruction; impeded respiration;
surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis;
pulmonary hypertension; emphysema; pulmonary transplantation rejection;
chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
cancer; ss.

XX OS Homo sapiens.
XX PN WO200062736-A2.
XX PD 26-OCT-2000.
XX PF 24-MAR-2000; 2000WO-US08020.
XX PR 06-APR-1999; 99US-0127958.
XX PA (UYEC-) UNIV EAST CAROLINA.
XX PI (NYCE/) NYCE J W.
XX PI Nyce JW;
XX DR WPI; 2000-679539/66.
XX PT Low adenosine (A) content antisense oligonucleotides which do not
trigger adenosine receptors during metabolism, useful e.g. for treating
cancers and respiratory obstructions -
XX XX Disclosure; Page 142-143; 1592pp; English.

Qy	1070	tgtatgcagctccccggccctatagagagagcgtcggaacttggaccagtgcgaagggc	1129
Db	4450	tgtatggcagtggaggtctccctcgtcggtccgcgaacccgaccactacctggggc	4509
Qy	1130	tgtctccgcgtccacggccctccggagactcggccgcgcctaacctgcctcttgccgc	1189
Db	4510	tgtctggccatcaaccagcgtctcaagacaacggccggccctcgtcgtcccttcgacaac	4569
Qy	1190	cacgcgcctcggcctgtgcgcccgagcccgcaaccccgagagaccgcgcggccct	1249
Db	4570	tgcacga-----tgaccctgtctctcaacaaccgtcggcgcatccct	4617
Qy	1250	gcttcttggcggagacggccgcgcagcgaaggtccctctccctgcagcgcactgcacgc	1309
Db	4618	gcttcttggcagtgacacccgatacaacggaaaccccaactggcagccatgcacacc	4677
Qy	1310	tgtgtctgcgcagacaaccgctctgcccgcgcgtcaaggcctcaatgcgactgga	1369
Db	4678	tctttatgcagagacaaccgctggtccacgcagctgagacgcctgaatcccgcgtga	4737
Qy	1370	gcgcggacgcgtgtaccagagagcgcgaaggtcgtgggcctctgcaccagatcatca	1429
Db	4738	atgcagacaactgtacaatgaggtcggagatcatggggccactggtccagatcatca	4797
Qy	1430	ccctgaaggattacatccccagatcctctgggaccgcggccttcagcagtagctgggtc	1489
Db	4798	cctaccgagacttctgccctggttctctggcgaagcccgccggccaggagaaacctgggc	4857
Qy	1490	cctatgaagctatgactcaaccgcgaacccacttgttccaacgtgttctccacgcg	1549
Db	4858	actcaaggggtactgctccaatgtggacccacgggtggcccaatg---tcttccacctgg	4914
Qy	1550	ccttcgccttcggccatgcacagatccaccctcgtgtgagggagctggacccagcttc	1609
Db	4915	ccttcgccttggccacaaatgctccagcctcatgttcgcgttggacagtcagtacc	4974
Qy	1610	aggagaccccgacctgccgggctgtgctgcaccaggctttcttcaggccatgacat	1669
Db	4975	gggctccgcacccaactgcagtctccacttagctgtcctcttgcagctggcgga	5034
Qy	1670	tactccgtggaggtggttggaccactaatcacgagcctcttctgaagacacgaccaac	1729
Db	5035	tcgtgatgaaggggcatacgaccctactccggggcctcatgscacccctgccaacg	5094
Qy	1730	tgcaggtcaggaatcagctgtatgaacgagagagctgacggaaaaggctcttctgtctca	1789
Db	5095	tgaacctcaggaatgcattgttagtgatgagctccggagccggacgtgttcttcggaatg	5154
Qy	1790	attccagcacttgatcttgaggtccatcaactcagagggggccggacacacggctgc	1849
Db	5155	ggaggatlgggcctggaccctgcagctctcaatgcacgaagccgggaccacggccttc	5214
Qy	1850	caggttacaatgagtggaggaggtctcggcctgcctcgtcgtgagaccccccgtgacc	1909
Db	5215	cagggtacaatcgttggaggcctctctgtggctctccagcccggaatttggcacagc	5274
Qy	1910	tgaagacagccaatgcacgaggaagcgtggccgacaagaatcctgtacttgtacaagcatc	1969
Db	5275	ttagcgggtgtgaaaaacaggacttggcagggaagtctctgaatttctatgataaac	5334
Qy	1970	ctacaacatcagatgtcgtgctggaggctctagctgaaaacttctcccccggctcggga	2029
Db	5335	ctgaacacatgcacatctggagtggggccatcgcctgagcctcttctgcgggggctcgag	5394
Qy	2030	caggcccccctgttgcctgtctctatttggaaagcagatgaaggctctcgggacgctgact	2089
Db	5395	tggggcctctctgctgtctgttcgaaacag-ttcagaagacgcgagacgagaca	5453
Qy	2090	ggttttgggtgggaacacgccactcttcacggatgcacagaggcgtgagtgtgagaagc	2149
Db	5454	ggttcgtgtggcagacgaggtgttttacc---aaagacagcgcgaagccctctgagcaga	5511

Query Match 14.3%; Score 438.2; DB 21; Length 6103;
Best Local Similarity 55.8%; Pred. No. 4.2e-86;
Matches 983; Conservative 0; Mismatches 733; Indels 45; Gaps 6;

[illegible]

Sequence 6847 BP: 1614 A: 1914 C: 1856 G: 1451 T: 12 other:

RESULT 14

Matches 1013; Conservative 0; Mismatches 790; Indels 42; Gaps 8;

```
Qy 454 ctgagcatcattcaaacatgtctggatgtctcccttacatgtctgcccccaaaaatgccca 513
Dy 2191 ctgaacctcattcaaacctgtcggtgtgtacgccccacggcggtgaacaactgtctg 2250
Qy 514 aacacttgcttgcggcaacaataacagccccatcacagagcttgcaacaacagagacc 573
Dy 2251 gacatgtctccacagaagtaccgagcagcagcagcagcagcagcagcagcagcagc 2310
Qy 574 ccagatggggccctcccaacagcgccttgccagcagatggtccctcagctatgagac 633
Dy 2311 cccatggggccctccctgctgagcgccttgagcgccttggaatccgtgtacagaa 2370
Qy 634 ggtctcagtcagcccgagcgtggaaccccgcttctgttacaacggtttcccaactgcc 693
Dy 2371 ggttcaaacacctcgggcatcaacccccacccagcagctgtacaacggcgagccctccc 2430
Qy 694 cgggtccggaggtgacaagacatgtcttaaatgttcaaatgaggtgttcacagatgat 753
Dy 2431 atgcggcgctgtgtcca-----ccacctgacgggagcggagcgttcacacccgac 2484
Qy 754 gacgcctattctaacctctgatggcatgggacataacatcagacagcatcgcttc 813
Dy 2485 gacagttcaccacatgctgatgagtgagtggggagcttcttgaccacgacctgactcc 2544
Qy 814 acaccagagcaccagcaagctgcttcggggaggggtctgactgccagatgacttgt 873
Dy 2545 acggtgtgcttgagcagcagcagcgttcttcgacgacgactgcagcaacgctgtgc 2604
Qy 874 gagaacaaacccatgttt---tcccatcaacctccgagggagggcgccggcgcg 930
Dy 2605 agcaacgacccccctgtctctctgtcatatcccccccaatgactccccggccagagc 2664
Qy 931 ggcacgcctgtctgcctctcaccgtcttcggcgcttcggcgacccggggaccaaaggc 990
Dy 2665 ggggcgcgtgcatgtctctgctgcctcagccctgtgtgcggcagc-----ggc 2715
Qy 991 gcgctcttgggaacctgtccagcgcacccagcagcagcagcagcagcagcagcagcagc 1050
Dy 2716 atgacttcgtctcagactcgtgtacccgctgtacccggagcagatcaacacgactcactcc 2775
Qy 1051 ttcttgagcgtccacacctgtgttgagctctcccgcccttagagagcagctcgcgaac 1110
Dy 2776 tacatgcagcatccaacgtgtacggagcagcagcagcagcagcagcagcagcagcagc 2835
Qy 1111 tggacagtcgcaagggctgctcgcgtccagcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 1170
Dy 2836 ctggcagcagcagcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 2892
Qy 1171 taccgtccttcgtgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 1230
Dy 2893 ctgctcccttcgccacggcgccgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 2943
Qy 1231 ggaagagccgcggcgctcttcttgccggagagcggcgccgcgcgcgcgcgcgcgcgcgcgc 1290
Dy 2944 ---gagagcccatccctgtctctgcccggggacacccgcgcgcgcgcgcgcgcgcgcgcgc 3000
Qy 1291 ctgacggcactgcacacgctgtggtcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 1350
Dy 3001 ctgaccagcatgcacacgctgtgttcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 3060
Qy 1351 gcctcaatgcgactgagcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 1410
Dy 3061 aagctgaacccgactgggagcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgcgc 3120
Qy 1411 gctctgaccagatcatcaccctgagggatgtacatccccagagtccttgaggaccggagccc 1470
Dy 3121 gcggagatcagacatcaccctaccagcactggtctccgagagatccttggggaggtgggc 3180
Qy 1471 ttccagcagtacgtgggtctccctgaaggctatgactccaccgcgcgcgcgcgcgcgcgcgcgc 1530
Dy 3181 at---gaggagcgtgggagatcaccagcgtctacgacccccgcgcgcgcgcgcgcgcgcgcgc 3237
```

```
Qy 1531 aacgtgttctccacagcgccttccgcttcggccatgccacgatccacccgcgtgtgag 1590
Dy 3238 aacgccttcgcacacgcgccttcaggtttggccacacgctgtgtcaacccactgctttac 3297
Qy 1591 aggtcgacgcagcgttccagagcaccacccgacctgcgcggcgtgtggtgcacccagct 1650
Dy 3298 cggctggagcgaactcc---agccattgcacaagatcaactccctccctcacaaagct 3354
Qy 1651 ttcttcagcccatgacattactccgtgaggtgtttggaccaccaataacagagccct 1710
Dy 3355 ttcttctctccctccgaggtgtgaaatgaggcgccatcgatccgcttccagggggcgcg 3414
Qy 1711 cttgcaagaccagcacaacgtgaggtgcaggtatcagctgataaacgagagctgcagcgaa 1770
Dy 3415 ttcgggtgtggcggaataatcgctgcccctgcagctgtgaacacgagctcacggag 3474
Qy 1771 aggtcttctgtctcaaatccagcacttgatctggctggcttcaatcaacacgtgcagag 1830
Dy 3475 cggctgttctccatggcacacacggtgtgtctgacctggcgccatcaacatccagcgg 3534
Qy 1831 ggcgggacccagcgcctgccaggttacaatgagtgaggaggttctgcggcctgcctcgc 1890
Dy 3535 ggcggggacccagcgcctgccacccctaccacgactacaggggtctactgcaatctatcgcg 3594
Qy 1891 ctggagaccccgctgacctgagcagcagccatccgacgagcgtgcccacacagatc 1950
Dy 3595 gcacacgcttcgagacgtgaaatgagattaaaacccctgagatccgggagaaactg 3654
Qy 1951 ctggactgtacaagatcctgcacacatcgtatgtctgtggctggggaggttagctgaaaac 2010
Dy 3655 aaaaggtgtatggctgcacactcaacatcgacctgtttccggcgctgtgtggaggagc 3714
Qy 2011 ttctctccagggctgcgacagggccctgtttgctgtctcattgtggagcagatgaag 2070
Dy 3715 ctggcgctgcagcgcgtggcgcccccctgtgtctctcagcacacagttcaag 3774
Qy 2071 gctctgcgggacggtgactggtttgtgggagacacagcacgctcttcacgagtcacag 2130
Dy 3775 cgctgcgagatgggacaggtgtgtgatatgagaacctggggtgtctcccgcccgag 3834
Qy 2131 aggcgtgagctggagaacactccctgtctcgtgtctgtatctgtgacaacactg---gcctc 2187
Dy 3835 ctgactcagatcaagcagacgtcgtgcgacggtatcctatgcgacaacgcggacaacatc 3894
Qy 2188 accaggtgcccagatgactcctccagtcgagcgaataatccccgaagactttgagcttgt 2247
Dy 3895 acccggtgcagagcagcgtgttcaggggtggcgaggttccctcagcggctacggcagctgt 3954
Qy 2248 gacagcatcactggtgacacctggagcgtgaggggaaaccttt 2292
Dy 3955 gacgagatccccaggtggacctccgggtgtgtggcaggactgtgt 3999
```

RESULT '15

AAQ11842

ID AAQ11842 standard; DNA; 2710 BP.

XX AAQ11842;

AC AAQ11842;

XX 02-AUG-1991 (first entry)

XX Bovine lactoperoxidase prepro enzyme gene.

XX LPO; autoimmune disease; antimicrobial; crosslinking agent;

KW immunoassay; preservative; ss.

XX Bos taurus.

XX Key Location/Qualifiers

FH 123..2261

FT /*tag= a

FT 123..201

[illegible]

QY 2029 acagggccctgtttgcctgtctcattgggaagcagatgaaggctctgcgggacggtgac 2088
 |||| | | |||| | | | |||| | | | |||| | | | ||||
Db 1992 gtggggccactcctgcctgcctcctagggaggcaattccagcagatcacgtgatggggac 2051
 |||| | | |||| | | | |||| | | | |||| | | | ||||
QY 2089 tggttttggtggagaaacagccacgtcttcacggatgcacagagcgctgagctggagaag 2148
 |||| | | |||| | | | |||| | | | |||| | | | ||||
Db 2052 aggtcttggtggagaaacctgggtcttctactgagaagcagcgggactctctacagaa 2111
 |||| | | |||| | | | |||| | | | |||| | | | ||||
QY 2149 cactccctgtctcgggtcatctgtgacaacactggcctcacagggtgcccattggtgcc 2208
 |||| | | |||| | | | |||| | | | |||| | | | ||||
Db 2112 gtctcttctcagcctcatctgtgacaacacacacacacacgaaggtcccgtgcatgcc 2171
 |||| | | |||| | | | |||| | | | |||| | | | ||||
QY 2209 ttccaagtcggcaaatccccgaagactttgagtcttctgtgacagcatcactggcatgaac 2268
 |||| | | |||| | | | |||| | | | |||| | | | ||||
Db 2172 ttccaggccaacactaccacacatgactttgtgattgctcaaccgttgataagctggat 2231
 |||| | | |||| | | | |||| | | | |||| | | | ||||
QY 2269 ctggaggcctgg 2280
 || | ||||
Db 2232 ctctaccctgg 2243
 || | ||||

Search completed: November 26, 2001, 09:21:54
Job time: 344 sec